# A NEW GENUS AND TWO NEW SPECIES OF DASYNINI (HEMIPTERA: HETEROPTERA: COREIDAE) FROM MADAGASCAR 

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Abstract.-Madagalaesus, new genus, and two new species, M. garciai and M. notios, from Madagascar are described in the tribe Dasynini (Coreidae). Habitus illustrations and drawings of the antennae, pronotum, and male and female genitalia are provided. A key to the known species is presented.

Key Words: Insecta, Heteroptera, Coreidae, Dasynini, new genus, new species, Madagascar

The Dasynini (Hemiptera: Coreidae) constitutes a distinctive and well-defined tribe characterized by having the head comparatively long, the anterior portion porrect, surpassing the antenniferous tubercles that are widely spaced; the tylus apically rounded; the eyes hemispheric and protruding; antennal segment IV longer than I; the rostrum reaching or extending beyond the mesosternum; the femora unarmed; the hind femur in the males not distinctly incrassate; the tibiae sulcate and not expanded; and species of the genus usually light colored.

Dasynini is primarily an Old World tropical and subtropical tribe distributed in the Eastern Hemisphere. In Africa, the tribe is represented by 5 genera and 14 species: Anadasynus China (one species), Dasynus Burmeister (one species), Galaesus Dallas (five species), Pseudopendulinus Schouteden (two species), and Theraptus Stål (five species) (Dallas 1852, Schouteden 1938).

In this work, Dasynini is recorded for the first time from Madagascar, with the description of one new genus and two new species.

The following abbreviations are used for the institutions cited in this paper: MNHN (Muséum National d' Histoire Naturelle, Paris, France); MNHP (National Museum, Prague, Czech Republic); UNAM (Instituto de Biología, Universidad Nacional Autónoma de México, Colección Nacional de Insectos).

All measurements are given in millimeters.

## Madagalaesus Brailovsky, new genus

Diagnosis.-Madagalaesus is similar to Galaesus Dallas, with the postocular tubercle indistinct, antenniferous tubercles unarmed, rostral segment IV the longest, collar wide, femora unarmed, and the female abdominal sternite VII with plica and fissura. Madagalaesus, known only from Madagascar, is recognized by having the humeral angles projected into large and acute spines; abdominal sterna III to VI yellow to pale yellowish orange, without black anterior margins; and antennal segments II and III cylindrical, with the apical third barely stout and carinate. In Galaesus,


Figs. 1-3. Pronotum of Madagalaesus spp. 1, M. garciai. 2-3, M. notios.
recorded from Beni, Cameroon, Belgian Congo, Gambia, Guinea, Mozambique, Sierra Leone, and South Africa, the humeral angles are obtuse and rounded; abdominal sterna III to VI yellow, or pale yellowish orange, or reddish orange and always with the anterior margin black; and antennal segments II and III uniformly carinate, with the apical third cylindrical or remarkably expanded, and obovate.

Description.-Body nearly parallelsided. Head: Wider than long, shorter than length of pronotum, pentagonal, non-declivant, dorsally flat, and distinctly produced and surpassing antenniferous tubercles; tylus unarmed, apically globose, barely raised, extending anteriorly to and laterally higher than juga; juga unarmed; antenniferous tubercles unarmed, borders entire, continuous, almost circular, not prominent, widely separated; antennal segment I thicker than succeeding segments, cylindrical, curved outward, apically slightly expanded, longer than head; antennal segments II and III slender, apically slightly expanded, and flanked by carinae, and segment IV fusiform; antennal segment IV longest, III shortest, and I longer than II, or antennal segment II longest, III shortest, and IV longer than I; ocelli proximate to eyes; preocellar pit deep; ocellar tubercles barely raised; eyes globose, upper margin located almost at same level as frontal and vertex area; postocular tubercle indistinct; mandibular plate unarmed; buccula rectangular, raised, short, entire, not projecting beyond antenniferous tubercles, meeting posteriorly, and closed; rostrum reaching posterior margin of metasternum or posterior margin of abdominal sternite III; rostral segment I not extending beyond base of head or reaching anterior margin of prosternum, or reaching or passing posterior margin of metasternum; rostral segment IV longest, III shortest, and I and II subequal.

Thorax: Pronotum wider than long, trapeziform, gradually declivant; collar wide; anterior border almost straight, smooth; frontal angles barely exposed; anterolateral borders obliquely straight, nodulose; humeral angles thick at base, tapering into remarkably large and acute spine, pointing strongly upward (Fig. 1), or tapering into medium-sized to stout spine pointing outward, slightly backward, and barely upward (Figs. 2-3); posterolateral borders sinuate, outer third nodulose, inner third smooth; posterior border straight or weakly concave, smooth; calli indistinct, not raised, with deep submedial longitudinal furrow; triangular process absent; pronotal disk without longitudinal medial carinae; posterior margin with low transverse ridge, running between humeral angles. Prosternum with deep excavation; mesosternum, and metasternum entire; anterior margin of mesosternum in front of area between fore legs produced into broad, blunt keel.

Legs: Unarmed; tibiae terete, sulcate.
Scutellum: Longer than wide, triangular, flat, apically subacute.

Hemelytron: Macropterous, reaching apex of last abdominal segment; costal margin emarginated; apical margin sinuate, with apical angle obtuse, extending beyond middle third of membrane.

Abdomen: Connexival segments distinctly raised above tergum, with posterior angle sometimes produced into short, subacute spine; abdominal sterna without medial furrow; abdominal spiracles circular, small, closest to anterior border, and remote from upper border of connexivum; abdominal spiracle II not visible.

Integument: Body surface rather dull, almost glabrous; posterior lobe of pronotal disk, clavus, and corium strongly punctate; head, calli, connexival segments, prosternum, mesosternum, metasternum, abdominal sterna, male genital capsule, and female genital plates impunctate; propleuron, mesopleuron, metapleuron
and acetabulae strongly punctate or with scattered punctures; scutellum transversely striate, strongly punctate or with scattered punctures; tibiae and tarsi densely clothed with large, erect, bristlelike setae; antennal segments with tiny setae, not densely adpressed.

Male genitalia: Posteroventral edge of genital capsule with lateral angles rounded, and mesial lobe stout and apically bifid (Fig. 6), or mesial lobe short and rounded (Fig. 7).

Female genitalia: Abdominal sternite VII with plica and fissura; plica short, subtriangular, reaching anterior margin of the sternite, or reduced to small hemispheric elevation; fissura covering $2 / 3$ to almost the entire length of sternite; gonocoxae I wide, enlarged anteroposteriorly, in caudal view closed, in lateral view convex; paratergite VIII triangular, spiracle visible; paratergite IX projected as a broad squarish lobe (Figs. 8-9).

Etymology.-The name emphasizes the relationship of this genus with Galaesus; and the contraction Mada, meaning Madagascar. Gender masculine.

Type species.-Madagalaesus garciai Brailovsky, new species.

## Madagalaesus garciai Brailovsky, new species

(Figs. 1, 4, 6, 8, 10)
Description.-Measurements: Male: Head length 2.20 ; width across eyes 2.28; interocular space 1.14; interocellar space 0.60 ; preocular distance 1.24 ; antennal segments lengths: I, 4.33; II, 3.87; III, 3.11; IV, 4.94. Pronotal length 3.34; width across humeral angles 6.61 . Scutellar length 2.12; width 1.90. Total body length 18.27. Female. Head length 1.97; width across eyes 2.37 ; interocular space 1.32 ; interocellar space 0.65 ; preocular distance 1.24; antennal segments lengths: I, 3.42; II, 3.26; III, 2.67; IV, 3.95. Pronotal length 3.42 ; width across humeral angles 6.46. Scutellar length
2.12; width 1.90 . Total body length 18.70 .

Male: Coloration: Pale orange yellow with following areas black: head dorsally with single and narrow longitudinal stripe on middle line, apex of rostral segment IV, anterolateral margins of pronotum, large discoidal spot on propleuron, mesopleuron and metapleuron, two wide discoidal spots on basal third of scutellar disk, basal $2 / 3$ of costal margin of corium, large discoidal spot between abdominal segments V-VI, two large discoidal spots on abdominal sterna III to V , and one on abdominal sterna VI-VII.; antennal segment I reddish brown with basal joint pale orange yellow; antennal segments II and III reddish brown with apical third black, and IV reddish brown with middle third black (Fig. 4); hemelytral membrane dark brown with basal angle pale orange yellow.

Head: Antennal segment IV longest, III shortest, and I longer than II; rostrum reaching posterior margin of metasternum; rostral segment I reaching base of head.

Thorax: Humeral angles tapering into remarkably large and acute spine, pointing upward (Fig. 1).

Abdomen: Connexival segments with posterior angles produced into short subacute spine; propleura, mesopleura, metapleura, and acetabulae strongly punctate.

Genital capsule. Posteroventral edge with lateral angles rounded, and mesial lobe stout, apically bifid (Fig. 6).

Female: Coloration similar to male holotype. Antennal segment I dark yellow, with basal joint paler; antennal segments II and III dark yellow with apical third black, and IV dark yellow with middle third pale brown; connexivum shiny reddish orange, with upper border pale yellow; dorsal abdominal segments shiny reddish orange with pale brown discoidal spot between segments V and VI; genital plates pale orange yellow.


Figs. 4-9. Madagalaesus spp. 4-5, Antennae. 4, M. garciai. 5, M. notios. 6-7, Male genital capsule. 6, M. garciai. 7, M. notios. 8-9, Female genital plates. 8, M. garciai. 9, M. notios.

Genital plates: Plica short, subtriangular, reaching anterior margin of sternite; fissura covered $2 / 3$ of total sternite length (Fig. 8).

Variation.-1, Antennal segment I dark orange with basal joint paler. 2, Antennal segments II and III dark orange with apical third black. 3, Antennal


Fig. 10. Dorsal view of Madagalaesus garciai, female.
segment IV dark orange with middle third pale brown. 4, Connexivum and dorsal abdominal segments shiny reddish orange. 5, Upper border of connexivum pale yellow or shiny reddish orange. 6, Abdominal sterna III and V with one black and large discoidal spot.

Type material.-Holotype: $\delta$, Madagascar, Diego Suarez ? (Legon Etrangire), 1903 (MNHN). Paratypes: Madagascar: 2 os, 1 ㅇ, Hera, Ankazoabo (without date) (MNHN, UNAM); 1 ㅇ, Morondava, Foret Sud de Betasy, January 1956, R. Paulian (RP) (MNHN); 1 if, Bekily, Region Sud de L' Ile, A. Seyrig (without date) (UNAM).

Etymology.-Named after Luis Garcia Prieto, a distinguished Mexican helmintologist.

## Madagalaesus notios Brailovsky, new species

(Figs. 2-3, 5, 7, 9, 11)
Description.-Measurements: Male: Head length 1.76; width across eyes 2.05; interocular space1.09; interocellar space 0.48 ; preocular distance 1.24 ; antennal segments lengths: I, 3.49; II, 4.18; III, 2.66; IV, 3.87. Pronotal length 2.81; width across humeral angles 5.01 . Scutellar length 1.90 ; width 1.67. Total body length 15.30 . Female: Head length 2.05; width across eyes 2.28 ; interocular space 1.29 ; interocellar space 0.61 ; preocular distance 1.39; antennal segments lengths: I, 3.64; II, 4.25; III, 2.73; IV, 4.02. Pronotal length 3.26 ; width across humeral angles 6.08. Scutellar length 2.20; width: 2.10. Total body length 18.60 .

Male: Dorsal coloration: Head pale yellow with preocular and postocular space black; antennal segment I shiny reddish orange, II and III dark orange with apical third black, and IV with basal half pale orange (basal joint black) and apical half pale brown (apex dark
brown)(Fig. 5); pronotum pale yellow with anterolateral margins, borders of humeral spine, and wide transverse stripe near posterior margin black; posterior margin dark yellow with reddish-brown punctures; scutellum dark yellow with reddish-brown punctures, and apically pale yellow; clavus dark yellow with reddish-brown punctures; corium dark yellow, with costal margin black (except apical third) and reddish-brown punctures; hemelytral membrane dark yellowish with basal angle pale brown; connexivum yellow with posterior angle and inner border black; dorsal abdominal segments III to VI shiny reddish orange, and VII shiny reddish orange with posterior border yellow and black stripe dorsally. Ventral coloration: Pale yellow with apex of rostral segment IV, and large discoidal spot at abdominal sterna IV and V black; coxae, and trochanter pale yellow; femora dark yellow with apex tinged with pale orange marks; tibiae and tarsi shiny reddish orange.

Head: Antennal segment II longest, III shortest, and IV longer than I; rostrum reaching posterior margin of abdominal sternite III; rostral segment I reaching anterior margin of prosternum.

Thorax: Humeral angles tapering into medium sized (Fig. 3) or stout spine (Fig. 2), pointing outward, and barely backward and upward.

Abdomen: Connexival segments with posterior angle produced into short subacute spine; propleura, mesopleura, metapleura, and acetabulae with scattered punctures.

Genital capsule. Posteroventral edge with lateral angles rounded, and mesial lobe short and rounded (Fig. 7).

Female: Coloration. Like male holotype. Connexival segments VIII and IX shiny reddish orange, with upper border yellow and inner margin suffused with pale brown marks; dorsal abdominal segments VIII and IX shiny reddish orange, genital plates pale yellow.


Fig. 11. Dorsal view of Madagalaesus notios, female.

Genital plates: Plica reduced to small hemispheric elevation; fissura covering almost entire length of sternite (Fig. 9).

Variation.-1, Humeral spine of pronotum shorter and robust (Fig. 2). 2,

Fore and middle legs with femora, tibiae, and tarsi dark yellow. 3, Inner margin of connexivum shiny reddish orange.

Type material.-Holotype: §, Madagascar, Mahaganga, Prov. Mahajamba,

River Ampatika Env., 10-12 December 1996, I. Jeanis (MNHP). Paratypes: Madagascar: 1 § , Bezanozano (coll. Noualhier 1898) (without date) (MNHN); 1 ㅇ, Ampandrandava, A. Seyrig (without date) (UNAM); 1 \&, Fomboni, A. R. (without date) (MNHN); 1 ㅇ, Madagascar, 1919, E. Fleutiaux (whitout data)(MNHN); 1 ठ , Bekily, Region Sud de L' Ile, A. Seyrig (whitout date) (UNAM).

Etymology.-From the Greek, notios, meaning southern, referring to the southern distribution of this species.

## Key to Madagalaesus Species

1. Head dorsally pale orange yellow, with narrow, longitudinal black stripe at middle line; pronotal disk without black transverse stripe near posterior margin; scutellar disk pale orange yellow, with two black discoidal spots on basal third; humeral angles tapering into remarkably large and acute spine (Fig. 1); posteroventral edge of male genital capsule apically bifid with stout mesial lobe, (Fig. 6) . . . M. garciai, n. sp. Head dorsally pale yellow, without a longitudinal black stripe; pronotal disk with a wide, transverse black stripe near posterior margin; scutellum dark yellow with reddish-brown punctures; humeral angles tapering into medium-sized (Fig. 3) or
stout spine (Fig. 2), pointing outward and barely backward; posteroventral edge of male genital capsule with short and rounded mesial lobe (Fig. 7) ... M. notios, n. sp.

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